

Claims

1. Lightweight sprocket, characterized in, that the sprocket consists of a central portion (1) made from light metal alloy, to which a peripheral toothed portion (2) made from ferrous alloy is joined, using rivets (3) for joining said portions (1,2), where said joining is created between radial beams (21) of the peripheral toothed portion (2) and pocket-like recess (13) in the central portion (1), radial beams (21) being overlapped across bottoms of pocket-like recesses (13), and where a thickness of radial beams (21), at least over the joining area, is decreased by 10 to 60%, in relation to full thickness of said toothed peripheral portion (2), and a thickness of a bottom of the pocket-like recess (13) in the central portion (1) is decreased by 20 to 70%, in relation to full thickness of the central portion (1) of the sprocket.
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2. Lightweight sprocket, according to claim 1, characterized in, that a centring of the peripheral toothed portion (2) in relation to the central portion (1) acts over an outer circumference of the central portion (1) of said sprocket.
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3. Lightweight sprocket, according to claims 1 and 2, characterized in, that rivets (3) for joining the central portion (1) with the peripheral toothed portion (2) are made of titanium alloy or stainless steel alloy.
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4. Lightweight sprocket, according to claims 1 to 3, characterized in, that a side clearance between the radial beams (21) of the peripheral toothed portion (2) and side walls of the pocket-like recesses (13) of the central portion (1) is from 0,5 to 10% of the rivet (3) shank diameter.
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5. Lightweight sprocket, according to claims 1 to 4, characterized in, that lightening openings (14) are created in the central portion (1) of the sprocket.

6. Lightweight sprocket, according to claim 5, characterized in, that at least a circumferential strip is created between said lightening openings (14) and the outer circumference of the central portion (1), where the thickness of said strip, in radial direction, is at least 50% of the full thickness of said central portion (1).

7. Lightweight sprocket, according to claims 5 and 6, characterized in, that a wall is created between the lightening openings (14) and the pocket-like recesses (13) of the central portion (1), where a height of said wall is the same as the full thickness of said central portion (1) and a width of said wall is at least 50% of the full thickness of said central portion (1) of the sprocket.

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